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March issue

RALEIGH AMATEUR RADIO SOCIETY

RARS

WORLDWIDE FRIENDSHIP

DAVE LANGLEY, W4YDY/K4IWJ
EDITOR

TOM ALEXANDER, WA4OTA
ASSISTANT EDITOR

P. O. BOX 12541

"Raleigh Amateur Radio Society News"

NEXT MEETING

The next monthly meeting of the RARS will be held Wednesday evening, March 4th at 7:30 PM. Tom Alexander, WA4OTA, will present a slide show about the field day operation held last year by RARS. The meeting will be at the Civil Defense Headquarters in the basement of the North Carolina State Government Administrative Building on 116 West Jones street. Ample parking is available behind the building. Please enter through the back door. Everybody is welcome.

DUES REMINDER

Remember that March 1 is the date that yearly dues fall payable to the club. Full members are assessed $10.00; Associate members $2.50. Only Novices and non-licensed members qualify as Associates. Members who joined after September 1, 1969 and paid $10 at that time, receive six months credit on their dues for the coming year and therefore are required to pay only $5. All dues are required to be paid within 30 days of their due date.

Any good club needs money in the bank to function. Our expenses for the first year of operation ran about $300. As the club grows and takes on more projects, this figure will, of course, increase. With Field Day and sponsorship of a League Convention in the works for this year the club will be pressed for funds, so let's get those dues in to Bill McDowell as soon as possible fellows. For those who are interested, a copy of the Club Financial Statement for 1969 is available to interested members. Write P.O. Box 12541.

WA4OTA

RARS PLANS LEAGUE CONVENTION

At the February meeting the membership tentatively settled upon October 31, 1970 as the date for an ARRL Convention in Raleigh. Of course that date is at this time subject to change. Bob Corns, K4MC, gave a report on possible sites to the Directors at the January 27th meeting and at that time the Statler Hilton Inn on Hillsborough Street was the first choice. Several committees have been set up to get this project rolling. Any comments, hints, or suggestions will be mighty, mighty welcome.

WA4OTA

1970 FIELD DAY PLANS

Remember the last field day and the fun we had? We didn't even try to win and we made an impressive score. This year, our aim is again to have fun, an impressive score, and win. We'll need a site, rigs, band-captains, loggers, operators, committee chairmen, power generators, good ideas, and your help. Contact K4CQJ, Tom Martin, to find how you can help.

FOR SALE

Gonset G-76 with dc supply, 80-6 meter xcvr; also HA-350 6-meter xcvr, transistorized walkie-talkie, 3 watts. Call Bruce Walton, K4BXY, phone 467-1920.

AUTO LICENSE TAGS FOR NC RADIO AMATEURS

If you did not get your 1970 auto license tag with your radio call sign, you can apply to the N.C. Department of Motor Vehicles in Raleigh for the 1971 tag. The deadline is November 1, 1970. It's too late to get a 1970 tag now.

The cost of the tag is one dollar extra. When you receive your card for the new tag, add another dollar to that shown on the card. For autos, that would be a total of $14. As long as you buy them each year, there is no requirement to re-apply each year. They are automatically produced. But if you miss buying the tag one year, you will have to apply again. North Carolina has given us this service because of the public service provided by amateur radio. Let's hope everyone that missed getting a tag this year will apply for next year.

MINI-TECHNICAL REVIEW

Feb 73. About patented 18" dipole for 15 meters, but author K9LGH does not object to amateurs building for their own personal experimentation. Obviously not broad-banded, it can be tuned to odd harmonics of the fundamental. Then, Hopefully, clean and solid resonance will keep one out of trouble with the FCC. For those with limited space, this antenna may prove very interesting. W2EUP hopes you like frequency synthesis, the modern way to control frequency, because that's what the remainder of 73 is about for February.

Feb QST has a very timely warning about tower hazards in its "Seems to Us....." Most salubrious. If you've ever wondered how blind hams avoid dipping the RF and maxing plate current, a very ingenious article discusses "Equipment Modification for the Blind." For those who just can't find anything to do in this carefree world, be sure to read the articles on erecting a sturdy 80 foot mast and winding your own power transformer. QST's rebuttal to the demise of the flying saucers is its treatment on long-delayed echoes, and spooky boomeranging QSO. Are echoes real or imagined? Read February QST.

Feb Electronics World has a heart-warming article on "Electronics and the Heart;" good news for those of us approaching silent key status. Also of more than passing interest are QSOs on regulated power supplies (like 20V and 1.5A), hybrid ICs (they are coming back), and John Frye's wondering why service technicians don't drop their probes and organize. (Even the IEEE is wondering how come plumbers and bricklayers retire at 45 with 45K.)

Feb Radio-Electronics keeps up with the competitive market by posing pretty girls, like page 4, in listening environment chairs(?), and a real neat trick using a homebrew electromechanical timer to indicate an oil change is due on the ole chariot. Also there is a goody on electronic aids to photography (no girls) and an old pro Mandl has a short article on how computers read the IBM card (the Hollerith Code bit). The fine series on tools for electronics is continued. The rest is the usual poop on the boob tube.

The Jan Spectrum has an article you can read without the sliderule. A rather complete rundown on the age, seniority, education, and nomadic habits of the professional engineers is given. One final conclusion is that personal ties bind engineers no less that the peasants. Picking up the sliderule again, there is a really fine article on the op amp in linear active circuits by one of the Bell Telephone genii. A real timely article is the one on the transistorized ground-fault interrupter to reduce shock hazards at such mundane locations as the home outlet.

Dec HAM TIPS of RCA discusses in technical detail neatly and with readable schematics and photos, a magnetic-tape keying system for code recording and transmission. It can be used for skeds and automatic calling in the pileups (qualifying for the A-1 Op Award). Total cost $30. So if it's really $60, still not bad.

Etc., etc... the printed circuit gets better every day, every year. Some day we got to get our files and subscriptions organized. I'm going to try microfiche as soon as I find the type of bait to use.

W4FMN

ANSWER TO "THOT PROVOKER" IN LAST ISSUE

Assume 3A enters at one end of the diagonal. Then following one current path through to the opposit end of the diagonal, add the IR drops across each resistor, i.e., 1+0.5+1, and obtain 2.5 volts. Since the series path is chosen:

R = 2.5/3 = 5/6 ohms

ANSWER TO "BRAIN TWISTER"

3 ohms !!! (shorts anyone?)

TODAY'S THOT PROVOKER

Two appliances are operated from a 120Vac source. One draws 12A at a lagging power factor of 80% and the other draws 8A at a leading power factor of 75%. Determine the total current and the power.

NOTE: Be sure to watch "Visit to MARS" on WRAL in Raleigh, WCSC in Charleston, WRDU in Durham, or WSJS in Winston-Salem in mid March. All about the work and jobs of the MARS members of hamdom. Most of the coverage is the Third Army area which includes its most industrious member, The Old North State, the Land of the Long Leaf Pine. Watch your local paper for exact time.

W4FMN

CAROLINAS FONE NET

The official rules and bylaws were passed by the members of the Carolinas Fone Net in a February session.

ARRL OFFICIAL BULLETIN NR 256

FCC has now taken final action on Docket 18508. Following up an ARRL proposal of some years back, the two-meter CW sub-band will change from 147.9 through 148.0 mHz to 144.0 through 144.1 mHz. Additionally, the F-1 sub-band on ten meters which is currently 29.0 through 29.7 mHz, will change to 28.0 through 28.5 mHz. These changes become effective March 2. Details will appear in March QST.

CAROLINAS NET

6:45pm----------3573kHz----------10:00pm

Well here we are with the first stretch of CN activity behind us. It appears things are getting started pretty well. Let's keep up the good work and make it even better. We can, you know!

LATE NET

I have appointed WB4ETF Manager of the Late session to replace WA4CFN who has been inactive for some time. I know you will all give Francis your cooperation when he needs it. Net managers need all the cooperation they can get!

CN ACTIVITY REPORT (Jan 15-31)

	On early	On late
Sessions	17	17
Total QNI	168	232 (Jan 1-31)
Total QTC	99	63 (Jan 1-31)
Avg. TFC	5.8	2.0

Note: For the near future you will be receiving only the RARS Bulletin; comments from net managers will be seen there. Send contributions to RARS Bulletin, Box 12541, Raleigh, N.C. 27605.

IDENTIFICATION OR "WHO ARE YOU?"
(See regulations section 97.87.)

I'm sure that many more of us have received a traffic ticket or warning than have received violation notices from the FCC. It would be best of course if we never received either. But human nature wills it otherwise. Well, when our FCC patrols the airways, it expects to be able to readily identify the signals it hears - by the station call-sign, not the way we sometimes do by recognizing sounds peculiar to a particular station.

The FCC did monitor the December 11, 1969 0000Z session of NCN and issued citations to at least three stations for

violation of rules, section 97.123, "Transmission of unidentified radio signals. Acknowledged receipt of message from W4IRE by transmission of letter T" (quoted from GHK's notice).

Despite my reservations concerning these notices (see accompanying memo), it is an observable fact that too often stations leave a net session without signing out in the only legal way! W4NOS DE W4XYZ QNO (or SK). To quote from regulation 97.87(a)(1) "--shall transmit the call sign of the station --- being --- communicated with, --- followed by the authorized call sign of the station transmitting." The "tail-ending" rule makes it okay to QNI with your own call (i.e., DE K4XYZ), but both calls, as above, must be sent when you leave a net. The same rules apply to a regular QSO (phone or CW).

NET RECRUITING

About the most effective way to locate new blood for CN, or any other net, is through first hand contact be it on-the-air QSOs or eye-ball meetings. I want to urge each of you to try your hand at recruiting new stations. Our big problem, as anyone can see, is having too few cities represented. This increases the difficulty of delivering traffic. Lets have a go at it - huh!

CORRECTION

Duty Roster: Change K4JFI to K4JIF (a nervous finger error!). The JFK Phone Net meets at 6:30pm on 3923kHz (not on 38 as in last bulletin).

73 and thanks for the hard work.

John Huffman, W4IRE (2/7/70)

CAROLINAS CW NET
CN January 1970 Report

CNE 6:45pm 3573 kHz CNL 10:00pm

Total sessions	17
Total Check-Ins	168
Average QNI	9.8
Total Net Time	450
Average Net Time	26.4
Different Stations	45
Total Traffic	99
Average Traffic	5.8
Message Rate	.21

Call	QNI	NCS	4RN
W4FMT	17		1
WB4MLI	14	5	2
W4EVN	10	3	
W4PED	10	2	1
K4FR	9		
WB4CBJ	9		
K4UOR	9		
K4BSS/4	9		2
K4CWZ	9		
W4IRE	7	3	1
WB4MQC	7	1	2
WB4ETF	7		
K4CAX	7		
K4CWZ	7		
WA4OWY	6		
W4NHT	6		
K4JIF	6		
WB4HGT	6		
WB4GAN	6		
WB4DXX	5	3	4
W4RWL	4		
WB4BGL	4		
K4MC	4		1
W4NTO	4		3
WA4APD	3		
WB4GHK	3		
WA4DLF	3		
K4QWQ	2		1
W4WXZ/4	2		
WA4WML	2		
WB4ILO	1		
K4GNX	1		
W4IQO	1		
W4VTR	1		
WB4FQS	1		
K4EIB	1		
*W4IJK	1		
*K4EIX	1		
W4BFB	1		
*K4GTX	1		
*W4HOJ	1		
*W4BUW	1		
*WA2LDX	1		
*WA8ZZI	1		
*K8HID	1		

*Out of state

CNE DUTY ROSTER

Day	NCS	4RN Rep
Monday	K4FR	K4JIF
Tuesday	WB4MLI	W4FMT
Wednesday	W4IRE	-
Thursday	W4PED	WB4DXX
Friday	W4IRE	WB4BGT
Saturday	WB4MLI	W4NTO
Sunday	W4EVN	-

Well, that's the story of the first month (or rather half-month) of the brand-new Carolina Net. I know I make a few misteaks, but nobody's perfect.

We are having some troubles, but after the first pains of birth are over, we should be able to iron them out.

One big problem is to get the NCS to show up. If you are a NCS and think you can't make it, please try to set up a substitute.

WB4MQC is off of the net for a while so he can work on getting a small problem with the FCC worked out. It seems he sent an "e" at the wrong place and the wrong time in the December 10 session of NCN. I suggest all net members re-read the rules concerning checking into a net so the same won't happen to you (or me, HI).

Thanks to all who participate in the net and keep those QNS reports coming, to me, not W4IRE!!!!!

Carl, WB4MLI

MEMORANDUM FOR RECORD

RE: The Dec. 11, (GMT) 1969 NCNE session; FCC form 793s issued to net members.

1. At 0000Z (7:00pm EST) Dec. 11, 1969 the NCN (early session) was called to order by W4IRE on 3573 kHz for the purpose of exchanging first and third party communications - informal as well as formal record messages, fulfilling the purpose of the NCN as part of the NATIONAL TRAFFIC SYSTEM of ARRL. NTS represents one aspect of the Public Service activities of amateurs.

2. During the ensuing fifteen minutes the following amateur stations were acknowledged and checked in: WB4ILO, K4MC, WB1JH, WB4HGT, WB4MQC, W4FMT, and WB4GHK in the order given. Three written messages were sent to W4IRE by K4MC(2) and WB4MQC(1). One message (QNC) was sent by NCS W4IRE to the net at approximately 0008Z. Acknowledgement of receipt of the QNC by receiving stations is called for while a net is still in session, as this one was, only if a copying station requires a "fill." The communications between W4IRE and the stations listed as QNI above was terminated individually during the period 0010Z and 0015Z in the manner prescribed in regulation 97.87(a), as far as can be recalled by the writer. The net was terminated (QNF) at 0051Z by W4IRE.

3. It would appear that the specific regulation which is most appropriate to a net type communication among amateur stations is regulation 97.87(a)(iii) (as written in the 1967 ARRL License Manual). The net session described in item 1 above surely would be interpreted as being legal under this section of the regulations, in views of the fact that the entire set span was almost exactly 15 minutes.

4. This memorandum has been written in response to the information that at least three of the stations mentioned as QNI in item 2 have received violation notices, form 793, from FCC monitoring station(s) who copied the December 11th net.

5. It is here noted that the violation report received by WB4GHK gives an "HOUR OF IRREGULARITY" of 5:51pm EST. This time is in error by at least one hour and fifteen minutes, as can be substantiated by any or all of the stations listed in item 2. The other form 793s presumably have the same error.

6. In conclusion, it seems to the writer that the violation notices issued to any of the stations (items 1, 2) should be reconsidered on the basis of the comments in item 3 above. To do otherwise will seriously curtail the speed and efficiency of many net-type operations.

7. Copies of this memorandum are being sent to all member stations of "CN" (Carolinas Traffic Net), to George Hart, ARRL, and to SCMs of NC, VA, GA, SC, Fla., CZ and PR.

John C. Huffman, W4IRE

RM of North Carolina
Manager CN (early)

The violation cited: "--- Acknowledged receipt of message from W4IRE by transmission of letter T." (or letter E in one case)

October 31, 1970
Roanoke Division ARRL Convention

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RALEIGH AMATEUR RADIO SOC.

HILTON INN

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YL-XYL PROGRAMMES
SATURDAY NIGHT BANQUET
AND MANY MANY MORE
CAREFULLY PLANNED
FEATURES & EVENTS TO
make this
A FINE CONVENTION

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AGAINST DISASTER
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FEB 25 1970